

JOHN ASHCROFT  
Governor

G. TRACY MEHAN III  
Director



STATE OF MISSOURI  
DEPARTMENT OF NATURAL RESOURCES

Division of Energy  
Division of Environmental Quality  
Division of Geology and Land Survey  
Division of Management Services  
Division of Parks, Recreation,  
and Historic Preservation

DIVISION OF ENVIRONMENTAL QUALITY

Southwest Regional Office  
318 Park Central East, Suite 500  
Springfield, MO 65806  
417/895-6950 FAX 417/895-6954

Greene County/HZW  
Litton

LOW 91-SW.002

Certified Mail  
P 684 497 112

February 4, 1991



R00337390  
RCRA RECORDS CENTER

Mr. Jim Dow  
President  
Litton Advanced Circuitry Division  
4811 West Kearney  
Springfield, MO 65803

RECEIVED  
FEB 08 1991

WASTE MANAGEMENT PROGRAM  
MISSOURI DEPARTMENT OF  
NATURAL RESOURCES

Dear Mr. Schaffer:

Please find enclosed the copy of the Hazardous Waste Compliance Inspection Report for the Litton - Advanced Circuitry Division facility in Springfield, Missouri. The report, I believe, is self-explanatory.

To demonstrate a return to compliance, Litton must submit the following documentation by March 8, 1991:

1. Certification that the beginning date of accumulation will be provided for the waste ammonium etchant,
2. Certification that the tanks in which hazardous waste are stored, including the waste oil tank, are properly marked and labeled,
3. Certification that the facility has the appropriate placard(s) available to offer to the transporter, and
4. Certification that the personnel training annual review has been conducted for all employees whose jobs relate to hazardous waste management. A copy of the documents demonstrating that the training has been given should be included in the submittals.

RCRA FILE COPY
MOD 007152903
DOCUMENT # 12901



Printed on recycled paper.

Litton LOW

February 4, 1991

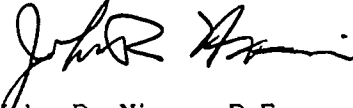
Page 2

A copy of the submittals must be sent to Mr. Bruce Martin,  
Department of Natural Resources, Waste Management Program, P.O. Box  
176, Jefferson City, MO 65102.

If you have any questions regarding this matter, please contact  
Charles Kroeger of this office.

Sincerely,

SOUTHWEST REGIONAL OFFICE



John R. Nixon, P.E.  
Regional Administrator

JRN/clk

enc.

cc: ~~Mr.~~ Bruce Martin, WMP  
~~Mr.~~ Neil Schaffer, Litton, Springfield

RESOURCE CONSERVATION RECOVERY ACT  
AND  
MISSOURI HAZARDOUS WASTE MANAGEMENT LAW  
COMPLIANCE EVALUATION INSPECTION REPORT

Facility:

Litton - Advanced Circuitry Div.  
4811 W. Kearney  
Springfield, MO 65803  
(417) 862-0751

EPA ID No.: MOD007152903  
Mo. Generator ID No.: 01317

Participants:

Department of Natural Resources

Charles L. Kröeger  
Environmental Specialist  
Southwest Regional Office

Litton

Mr. Neil Schaffer  
Environmental Engineer

Introduction:

A Hazardous Waste Compliance (RCRA) Inspection was conducted at the Litton - Advanced Circuitry Division facility on January 28, 1991. The inspection was conducted under the authority of Sections 260.375(9) and 260.377 RSMo for the purpose of determining the compliance status of the facility relating to hazardous waste handling and disposal. The inspection was conducted as a special request inspection in response to a memo from the Springfield Sanitary Services Department regarding possibly hazardous waste problems at the site.

Facility Description:

Litton is a large quantity generator which manufactures printed circuit boards. The Springfield facility employs 500+ people working 3-8 hour shifts, some of which work 6 days/week.

The facility receives copper coated laminant as a raw product, sheers the material to size, computer drills the boards, then performs dry film imaging. The boards then go through either an electroless copper procedure or an electrolytic copper plating operation. These plating operations involve series of tanks containing cleaning agents, rinses, and oxidizers. The wastewater from the operations are piped to one of two pretreatment systems or a recycle system.

After the boards are copper plated, they are solder plated then the film is removed and the excess copper is etched in either the ammonium etchant or the cupric chloride etchant. For those boards requiring gold tipping, the process is performed following the etching. The boards are then solder masked, routed, inspected, and prepared for shipment.

The multi-layered boards go through similar processing but are stacked and laminated prior to routing and fabrication.

The following hazardous waste are generated during the processes:

Ammonium etchant (D002) which is bled off into a day tank for accumulation as the process tank is continuously regenerated. The accumulated waste etchant is then piped to a tank in the bulk storage area. This waste is generated at the rate of about 25,000 gallons/3 months and is shipped to the Southern California Chemical Company in Garland, Texas, for regeneration and reclamation.

Cupric chloride etchant (D002) is bled off directly to one of two storage tanks in the bulk storage area. This waste is generated as the process tank is continuously regenerated. The generation rate is estimated to be about 5,000 gallons/3 months and it also goes to the Southern California Chemical Company in Garland, Texas, for regeneration and reclamation.

Pretreatment sludge (F006/F008) is generated in the treatment of the wastewater prior to discharge to the Springfield municipal sewerage system. Wastewaters from the board preparation processes go to one of three treatment processes.

The batch treatment process is used to treat the more highly contaminated waste waters. This system consists of 6 tanks to which the wastewaters are piped then treatment chemicals (basically ferrous sulfate and sodium sulfide) are added. After mixing, the sludge is allowed to settle out then the water is filtered through 1 micron filter bags and piped to the municipal sewerage system. The sludge is piped to the sludge thickening tank. About 12,000 gallons of water are treated per week in the batch treatment operation.

The moderately contaminated wastewater such as the rinses, is piped to an equalization basin in the wastewater treatment area of the facility. This water, which has mainly lead and copper contamination with traces of other metals, then flows into a flocculation pit where the flocculent is added.

Water flows from the floc pit to the clarifier where the sludge settles out and the supernate flows out to a sump pump. Water is pumped from the sump into the filters and then to one of two ion exchange columns. The sludge from the clarifier is pumped to the sludge thickening tank where polymers are added. The sludge is then filter pressed, dried, and bagged in cubic yard bags. The water from the filter press goes into the holding pond.

The less contaminated water from the plant is piped to an in-ground holding pond which is a concrete basin with containment. This water is processed through the sand filter recycling system prior to reuse in the facility. No hazardous waste is generated in this process.

Waste oil (D098) is generated at the facility in maintenance of equipment such as hydraulic presses, compressors, drills, etc. The oil is generated at a rate of about 1000 pounds/month and is disposed of through South West Oil of Carthage.

Scrap printed circuit boards are now handled as a hazardous waste because they fail the TCLP test for lead. They did not fail the EP Toxicity Test. The boards are generated at a rate of about 10,000 pounds/week and are presently being stored on-site awaiting disposition. Litton has been in contact with the U.S. EPA regarding a final determination on whether or not the boards must be handled as a hazardous waste. The boards have, in the past, gone to a smelter for reclamation of the lead but there are very few known facilities authorized to receive the boards as a hazardous waste. Litton has received a ninety day extension for storage of the boards. The scrap boards are accumulated in bins in 6 - 8 locations throughout the plant and are removed from the bins about every six hours then transferred to the storage containers. The bins and the storage containers were properly labeled.

Waste mercury vapor lights (D009) have been found to fail the TCLP and are being handled as a hazardous waste. The facility generates about 20 pounds/quarter and has received an extension for storage of the bulbs. A facility has been located which can accept the waste and shipment is scheduled to be made prior to February 4, 1991.

Methylene chloride (F002) is generated in small amounts at the facility but should be eliminated by the end of February due to the completion of a contract which required its use. The waste was generated in large amounts in the past until the facility installed a distillation unit. This decreased the waste amount to about 5 gallons of sludge per month which was added to the pretreatment sludge for disposal.

Gold stripper and plating bath (F007 and F009) were generated in the past, however the facility now has its own plater and the solution goes to the pretreatment system.

Mr. Schaffer indicated that he is in the process of updating the Notification of Hazardous Waste Activity to show the elimination of three of the waste streams and the addition of two others. There has been a delay in submitting the form because of the questions regarding the classification of the printed circuit boards as a hazardous waste or an exempt waste being reclaimed.

At the time of the inspection there were 9 one cubic yards bags of sludge in storage and one under the dryer which was almost full. There was also waste oil stored in two tanks on the north side of the plant and waste etchant in the bulk storage area.

During the fourth quarter of 1990, 52.04 metric tons of pretreatment sludge were shipped to the Cyprus Miami Mining Company in Claypool, Arizona for reclamation. The waste was transported by Tri-State Motor Transit (Mo. ID No. H-1144).

Also during that quarter, there were 18,120 gallons of waste ammonium etchant and 4,060 gallons of waste cupric chloride etchant shipped to Southern California Chemical Company for reclamation. The waste was transported by Southern California Chemical Company (Mo. ID No. H-1821). (The Waste Report Summary Sheet listed the ID No. as H-1207 which is issued to Inland Waters Pollution Control of Detroit, Michigan)

Unsatisfactory Features:

The 40 CFR regulations cited have been adopted by reference in the Missouri Hazardous Waste Management Law.

1. Failure of a generator of hazardous waste to provide the beginning date of accumulation; 10 CSR 25-5.262(1) referencing 40 CFR 262.34(a)(2).
2. Failure of a generator of hazardous waste to maintain the marking and labeling requirements for containers of hazardous waste; 10 CSR 25-5.262(1) referencing 40 CFR 262.34(a)(3).
3. Failure of a generator to make placards available to the transporter; 10 CSR 25-5.262(1) referencing 40 CFR 262.33.
4. Failure of a generator of more than 1000 kg to provide the annual review of the personnel training; 10 CSR 25-5.262(1) referencing 40 CFR 262.34(a)(4) further referencing 40 CFR 265.16(c).

Comments:

Mr. Neil Schaffer provided the information on the operations at the facility, provided copies of the related paperwork, and conducted the tour of the facility.

During the opening conference of the inspection, credentials were displayed and the purpose of the inspection was explained. Mr. Schaffer provided information on the products of the facility and the manufacturing processes involved. The process of requesting confidentiality was explained and the use of a camera for documenting findings was discussed. Management indicated it was company policy not to allow cameras in the plant. It was decided not to press the issue unless it was determined that violations needed to be documented with photographs.

Following the opening conference, a tour of the facility was conducted to review the processes and to inspect the satellite accumulation and hazardous waste storage areas. The relevant paperwork was reviewed at the close of the tour. The closing conference involved a discussion of the violations with Mr. Schaffer and Mr. Jim Dow, Plant Manager. They were advised that they would receive an inspection report that would describe each of the violations in detail and a Letter of Warning which would contain a compliance schedule.

The bulk storage tank holding the waste ammonium etchant was not marked or labeled to identify the contents and there was no beginning date of accumulation provided. The regulations require the tank to be labeled or marked clearly with the words "Hazardous Waste". Mr. Schaffer indicated that the hazardous waste storage tank and the day tank for accumulation had labels on them but the nature of the contents apparently caused the labels to come off. He indicated he would provide laminated labels to prevent a reoccurrence of the problem.

It was later determined that the day tank is not a satellite accumulation container since it is not portable and it is plumbed into the process. This eliminates the need for labeling and marking the beginning date of accumulation.

The regulations require that the generator either placard his waste or offer the initial transporter the appropriate placards. The appropriate placards should be maintained at the facility in case they are needed.

An annual review of the personnel training is to be provided to all employees whose job position is related to hazardous waste management. The last training given at the facility was in August, 1989.

Mr. Schaffer indicated that the training was being put on VHS tape because of the diversity of employees schedules and that it is to be completed and presented to the employees within two weeks. They had delayed completing the tapes in hopes of getting a final decision on the classification of the scrap printed circuit boards.

It was noted during the inspection that the labels on the waste oil storage tanks were barely legible. The new waste oil rule requires the words "Waste Oil" to be printed on the tanks in letters that are at least one and one-half inches high. Because the tanks are plastic and paint may not stick well, it may be necessary to adhere some type of lettering on them.

The hazardous waste storage tanks are plastic tanks setting in a plastic lined containment system. Litton plans to install an additional tank in the future for which a complete assessment will be required by an independent, qualified, registered professional engineer.

The Springfield Sanitary Services representatives conducted an Annual Pretreatment Inspection at Litton on October 9, 1990. A copy of that memo was received in the Southwest Regional Office of the DNR on January 24, 1991 (copy attached).

The memo indicated there was evidence of equalization tank overflows which apparently spilled onto the ground. The area surrounding the tank is soil and gravel. Waste water that would have overflowed the tank would have been moderately contaminated with copper and lead with traces of other metals. Mr. Schaffer indicated that the lead concentrations generally run <1 ppm.

The memo also referred to problems with the underground drain which carries the water from the clarifier to the sump before it is filtered. There appeared to be some restriction or possible collapse of the drain line which may have allowed clarifier effluent to enter the ground or shallow groundwater. The line is being abandoned with the installation of a new basin and piping system.

A third point referred to in the memo was the discharge from the wash sink in the maintenance shop. Paint brushes were cleaned in the sink which discharges onto the ground near the holding pond. Only latex paint is used so there have been no solvents involved but there could be metals such as barium in the paints. Mr. Schaffer indicated the wash water could not presently go into the holding tank because the latex particles would disrupt the recycling system.

The paint brush washing operation is being relocated so that wash water can discharge directly into the municipal sewerage system. The remainder of the water from handwashing in the existing sink can then discharge to the holding basin.

Litton has demonstrated that they are working to correct the problems which were brought to their attention by the city personnel.

Recommendations for Compliance

The following recommendations are made as a result of the January 28, 1991, inspection and are for use as guidance for implementing corrective action. It is the responsibility of the facility to implement specific actions to return to compliance and to demonstrate such return to compliance.

1. Provide the beginning date of accumulation for the ammonium etchant waste.
2. Properly mark and label all tanks used for storing hazardous waste including the waste oil tanks.
3. Maintain the appropriate placard(s) at the facility.
4. Provide annually, a review of the personnel training for all employees whose positions relate to hazardous waste management.

Submitted by,



Charles L. Kroeger  
Environmental Specialist

Approved by,



John R. Nixon, P.E.  
Regional Administrator

MEMO TO FILE

October 9, 1990

Litton Industries Annual Pretreatment Inspection:

On October 4, 1990, Steve Short and Bob Corson conducted an annual pretreatment inspection of the Litton facility located at 4811 West Kearney.

This narrative will be attached to the questionnaire completed during this inspection.

Personnel present at the preinspection conference and facility inspection were:

Neil Schaefer - Litton Industries  
Jay Robinson - Litton Industries  
Steve Short - City of Springfield  
Bob Corson - City of Springfield

The following information was gathered during this inspection:

- A) The following new production areas were added to the facility since the last annual inspection.
  - 1) Pisum- electro-static spray film
  - 2) Electroless Nickel plating - located in the gold plating area.
  - 3) Hot oil line
  - 4) Polyimer thick film
- B) Wastewater treatment sludges are reclaimed by Cypress Miami of Claypool, Arizona.
- C) Unclean bag filters, from wastewater treatment, were observed in the solid waste dumpster which is disposed of at the Springfield Sanitary Landfill.
- D) Wastewater treatment and recycle records for the date requested, August 3, 1987, were incomplete. Flow records, 1st and 3rd shift treatment records and laboratory records were present but no record for 2nd shift treatment was found.
- E) In the wastewater treatment area there was evidence of equalization tank overflows. These overflows apparently spilled onto the ground and ran overland to the recycle basin. The flow rate must be manually controlled from the equalization basin and Neil Schaffer indicated that automatic controllers will be installed to correct this flow problem.

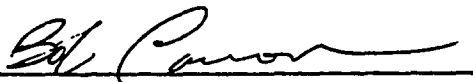
- F) The water level in the final clarifier tank, in wastewater treatment, was approximately one foot over the wall. According to Neil Schaffer, the design flow rate for the clarifier is 250 gpm. Flow rate at the time of our inspection was 140 gpm. The flow rate for the rest of the treatment system, according to Mr. Schaffer, should not cause the elevated level in the clarifier. As the plumbing associated with the clarifier is quite old there may be some problems associated with the drain lines. Litton should investigate the situation and advise the City of the results.
- G) The recycle basin showed severe erosion of the concrete walls.
- H) The containment basin under Cycle Master III showed severe erosion of the concrete floor.
- I) Wash sink in maintenance shop discharges onto the ground in the wastewater treatment area. Paint brushes are cleaned in this sink and there are evidence of paint on the ground in the wastewater treatment area.
- J) Material unloading area spill containment dike has a broken drain in the curbing which would allow spilled material to escape.
- K) Storm water drain in the material unloading area is not valved and discharges to the storm drain in the field north of the plant. This drain was dye traced during our visit to verify the point of discharge.
- L) Flammable storage area has three drains in the diked area. Litton personnel were unaware that these drains were present. Mr. Schaffer indicated that these drains would be sealed.
- M) According to Neil Schaffer, Litton does not have a written spill control plan with respect to spills to the sanitary sewer. However, an action plan was posted on the wall in wastewater treatment containing information and procedures for the operators to follow in case of a spill or slug discharge to the sanitary sewer. Information has been provided Mr. Schaffer on the form and content of a spill control plan.

*is being replaced*

*To be relocated  
to plumber  
directly to city  
sewers -  
existing pipe to be  
plumbed to belly  
pond*

The above information was presented in the exit conference.  
Those personnel present at the conference were:

Neil Schaffer - Litton  
Tom Bokel - Litton  
Tommy Kopeka - Litton  
Bob Corson - City of Springfield  
Steve Short - City of Springfield

A handwritten signature in cursive script, appearing to read "Bob Corson", written over a horizontal line.

Bob Corson  
Water Pollution Control Inspector III  
Surveillance, Enforcement and Billing

## LARGE QUANTITY GENERATOR CHECKLIST

Form LQG-INSP  
(10-15-88)

Name of Facility: Litton Advanced Circuitry Div. Date: 1-28-91  
Address: 4811 W. Kearney  
Springfield, MO 65803  
Phone: (417) 862-0751 MO ID# 01317 EPA ID# MO D007152903  
Facility Representative: Neil Schaffer Title: Env. Engineer

Briefly describe manufacturing process(es). (Use continuation sheet, if needed.)

Manufacture of printed circuit boards -  
raw material - copper coated laminant - sheared to size - computer drilled,  
imaged (dry film) electrolytic copper plating, Cu plated Solder plated, remove film  
etch excess Cu, tipped (if req'd) Solder masked (photoimage or hand) routed  
(ammonia etchant) (pH 10.4) multi-layer also produced - stack & laminated prior to routing  
dry film fabricate

List of wastes generated. (Use continuation sheet, if needed.)

Waste	Amount/Month	Disposition
1. <u>F006/F008 Pretreatment Sludge</u>	<u>38,900/mo</u>	<u>Cypress Miami (Smelter) AZ</u>
2. <u>D002 Ammonia Etchant</u>	<u>25,000 gal/3mo</u>	<u>Southern California Garland, TX</u>
3. <u>D002 Copper chloride</u>	<u>5,000 gal/3mo</u>	<u>" "</u>
4. <u>D098 Waste Oil</u>	<u>1000 lbs/mo</u>	<u>S.W.O.D. Radium</u>
<u>D008 Scrap circuit boards</u>	<u>10,000 lb/wk</u>	
5. <u>D009 Mercury Vapor bulbs</u>	<u>20 lb/gtr</u>	

## A. MANIFESTS AND RECORDKEEPING 10 CSR 25-5.262(2) AND 5.262(2)(B) AND (D)

Generator's MO and EPA I.D. Numbers. . . . . (✓)  
Manifest document number (MO I.D. & Shipment #). . . . . (✓)  
EPA Waste I.D. codes . . . . . (✓)  
Generator's name, address, phone # . . . . . (✓)  
All Transporters' names, phone #'s, MO and EPA I.D. #'s. . . . . (✓)  
Designated facility name, address, phone # and MO and EPA I.D. # . . . . . (✓)  
Proper DOT Shipping Name, Hazard Class and I.D. # . . . . . (✓)  
Containers, Quantity and Unit Wt/Vol being shipped properly designated. (✓)  
Proper certification including waste minimization. . . . . (✓)  
Manifest properly signed and dated . . . . . (✓)  
No more than 10 days time between generator and facility signatures. . . . . (✓)  
Manifests returned within 35 days. . . . . (✓)  
If not, exception generator report submitted within 45 days. . . . . (✓)  
Completed manifests and Summary Manifest Report and Certification. . . . . (✓)  
Spills of reportable quantities reported to EPA. . . . . (✓)

## B. PRETRANSPORT, CONTAINERIZATION AND LABELING 10 CSR 25-5.262(2) AND 5.262(2)(C)1

Waste Packaged, marked and labeled per DOT during entire on-site storage period and prior to transport. . . . . (✓)  
Placards available for use by transporters . . . . . (✓)  
Satellite accumulation requirements met (if applicable). . . . . (✓)  
a. Stored in satellite areas less than 1 year. . . . . (✓)  
b. Containers marked identifying contents and beginning date. . . . . (✓)  
c. Containers kept closed/compatible/good condition. . . . . (✓)  
d. Quantities accumulated not exceeding 55 gal. (1 qt. acutely hr. waste). . . . . (✓)

## C. STORAGE STANDARDS 10 CSR 25-5.262(2) AND 5.262(2)(C)2 AND 3

Facility inspected and maintained. . . . . daily (✓)  
Date of accumulation marked. label come off of ammonia etchant (✓)  
Storage less than 90 days (unless small quantity generator). . . . . (✓)

## D. CONTAINER STORAGE 10 CSR 25-5.262(2) AND 5.262(2)(C)2

Containers in good condition . . . . . (✓)  
Containers kept closed in storage. . . . . (✓)  
Containers storing incompatible waste separated or protected from each other. . . . . (✓)  
Containers of ignitable or reactive waste stored > 50 feet from property line . . . . . (✓)  
Containers stored within a containment system (if applicable) meeting criteria of 10 CSR 25-5.262(2)(C)2.B. . . . . (✓)

FEB 08 1991

last training - 8-89 -  
waiting for Circumstantial determination  
Presently taping the rest  
of the training because  
of diverse schedules

E. STORAGE TANKS 10 CSR 25-5.262(2) AND 5.262(2)(C)2.C.  
(See tank checklist)

Installed > 7 years ago  
adequate containment

F. PERSONNEL TRAINING 10 CSR 25-5.262(2)

- Documentation of hazardous waste director's qualifications or training. (✓)
- Completed classroom or on-the-job training. . . . . (✓)
- Job title, description, and name of person filling position . . . . . (✓)
- Written record of the type and amount of training given . . . . . (✓)
- Documentation confirming that training has been given . . . . . (✓)

G. PREPAREDNESS AND PREVENTION 10 CSR 25-5.262(2) AND 5.262(2)(C)2.E.

- Internal communication or alarm system. . . . . (✓)
- Device in the hazardous waste operation area capable of summoning emergency assistance. . . . . (✓)
- Fire control, spill control, and decontamination equipment available. . . . . (✓) well equipped
- Adequate water supply for fire control equipment. . . . . (✓)
- Adequate and proper safety equipment available. . . . . (✓)
- Adequate aisle space. . . . . (✓)
- Arrangements with local emergency agencies. . . . . (✓) written response also Reidel

H. CONTINGENCY PLAN AND EMERGENCY PROCEDURES 10 CSR 25-5.262(2)

- Contingency Plan. . . . . (✓)
- Detailed description of procedures that personnel must implement to respond to fires, explosions, or releases of hazardous waste. . . . . (✓)
- Describe formal arrangements with emergency agencies. . . . . (✓)
- Name, addresses, and phone numbers (home & office) of emergency coordinators. . . . . (✓)
- Emergency equipment including its description and location. . . . . (✓)
- Evacuation plan if applicable . . . . . (✓)

I. WASTE OIL 10 CSR 25-11.010

- Written waste oil contract maintained . . . . . (✓)
- Waste oil properly stored and transported . . . . . (✓)

Labels faded out

COMMENTS:

\_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_

Inspector Signature & Title:

Charles L. Grogan - Env Specialist

Office:

SWRO

IN COMPLIANCE

(✓)

IN VIOLATION OR  
ABSENT

( )

LAND DISPOSAL RESTRICTION CHECKLIST  
FOR P-SOLVENT AND DIOXIN WASTES

Facility: LITTON - ADVANCED CIRCU DIV. Date: 1-28-91 C. TREATMENT/STORAGE FACILITY REQUIREMENTS

4800 W. Kearney  
Spfld Mo

Facility Representative: Neil Schaffer

Title: Env. Eng.

Facility Status: Large Quantity Generator ☒  
Small Quantity Generator ☐  
Treatment/Storage Facility ☐  
Land Disposal Facility ☐  
Permitted ☐

Missouri I.D.#: 01317

EPA I.D.#: MO D007152903

Phone #: 417-862-0751

A. GENERAL

1. Specify the wastes handled by the facility which are subject to the land disposal restrictions:

EPA Waste Code (FOOI)	Waste Description
a. <u>F006/D008</u>	<u>Pre-treatment Sludge</u>
b. _____	_____
c. _____	_____
d. _____	_____

Are these wastes properly classified? Yes ☒ No ☐

2. Which, if any, of the following exemptions or extensions apply to this facility?

- Two-year national capacity extension of the effective date for solvent wastes generated by small quantity generators (260.30) ☐
- Two-year statutory exemption for solvent wastes generated from RCRA corrective or CERCLA Section 104 and 106 response actions (260.30) ☐
- Two-year national capacity extension of the effective date for solvent-water mixtures, solvent-containing sludges, or solvent-containing soil (non-CERCLA/RCRA corrective action) containing less than 1% total FOOI-FOO5 solvent constituent (260.30) ☐
- Other, specify 260.4, 260.5, 260.6, 260.31, 260.44) ☐

3. Has the facility used dilution of a restricted waste as a substitute for adequate treatment to achieve compliance (260.31)?

yes \_\_\_\_\_ no ☒

4. List facilities to which off-site shipments of restricted wastes have been sent and/or from which shipments have been received.

a. Hydrocarbon Recyclers  
b. Cypress Miami Mining Co

B. GENERATOR REQUIREMENTS

1. Generator has adequately tested his wastes using the TCLP, or applied knowledge, or both. (260.7(a)).....(X)
2. Generator has determined the appropriate treatment standards for his restricted wastes. (260.7 and Subpart D).....(X)
3. The generator is not sending restricted waste to a land disposal facility for direct land disposal without treatment.....(X)
4. a. If restricted wastes require treatment prior to land disposal, then the generator has provided notification to the treatment facility with each off-site shipment. (260.7(a)).....(X) ✓
- b. If restricted wastes do not require treatment prior to land disposal, then the generator has provided a notification and certification to the LDF that the wastes meet all applicable treatment standards and prohibitions (260.7(a)).....( )
- Certifications properly worded.....( )
5. If the generator's restricted waste is subject to any exemptions or extensions, then the generator has sent notices with each

1. The facility is not sending restricted waste to a land disposal facility for direct land disposal without treatment.....( )
2. The treatment facility has adequately tested its treatment residues using TCLP, or applied knowledge, or both to determine whether or not they meet the applicable treatment standards specified in 260.41 (260.7(b)).....( )
3. The facility has modified its waste analysis plan to include the additional testing requirements of 260.7, referenced in 264.13 and 265.13.....( )
4. a. If the waste treatment residues do not meet applicable treatment standards or prohibitions, and are sent to another treatment facility prior to land disposal, then the facility complied with the generator notification requirement of 260.7(a). (260.7(b)).....( )
- b. If the treatment residue does not require further treatment prior to land disposal, then the facility submitted to the LDF with each shipment of waste residue a certification that the waste is in compliance with applicable treatment standards. (260.7(b)).....( )

- Certifications properly worded.....( )

5. The facility's written operating record has been modified, and now includes the documentation required by 264.73(b)(3)(10)(11)(12) or 265.73(b)(3)(8)(9)(10).....( )
6. If the facility has stored restricted wastes for greater than one year, then it can satisfactorily demonstrate that the storage has been for the purpose of accumulating an amount necessary to facilitate proper recovery, treatment or disposal (260.50)....( )
7. If the treatment facility is permitted, it has made the necessary minor modifications to its permit to allow it to treat restricted wastes not previously specified in the permit (270.42(0)).....( )

D. LAND DISPOSAL FACILITY REQUIREMENTS

1. The facility is not land disposing restricted wastes.....( )
2. The land disposal facility has records of notifications and certifications submitted by all applicable generators and storage and treatment facilities for each shipment of waste or waste treatment residue accepted for land disposal. (260.7(c)).....( )
3. The LDF has modified its waste analysis plan in accordance with the additional requirement of 260.7, referenced in 264.13 and 265.13.....( )
4. The LDF has adequately tested the wastes received using TCLP, applied knowledge, or both. (260.7(c)).....( )
5. The facility's written operating record has been modified, and now includes the documentation required by 264.73(b)(3)(10)(13)(14) or 265.73(b)(3)(8)(11)(12).....( )

COMMENTS:

Please mark boxes as shown (X) In compliance ( ) In violation

Inspector's Signature Charles L. Jorgensen

Title Env. Spect.

Office SWRO



## MISSOURI DEPARTMENT OF NATURAL RESOURCES

P.O. BOX 176

(314) 751-3176

JEFFERSON CITY, MISSOURI 65102

## GENERATOR'S HAZARDOUS WASTE REPORT SUMMARY SHEET

PART II

OFFICE USE ONLY

## NOTE ► PLEASE READ INSTRUCTIONS AND EITHER PRINT OR TYPE

Entries made on this page must summarize the total amount of waste transported off-site to an individual facility during the specified quarter. Separate sheets must be completed for each facility utilized.

## SECTION 1 REPORT IDENTIFICATION

1. FOR THE PERIOD ENDING (CHECK ONE &amp; FILL IN YEAR)

☐ 9-30- (YEAR)☒ 12-31- 70 (YEAR)☐ 3-31- (YEAR)☐ 6-30- (YEAR)

2. PAGE

3 OF 3

3. GENERATOR'S MISSOURI I.D. NUMBER

6-1-3-1-7

## SECTION 2 FACILITY IDENTIFICATION

4. FACILITY NAME (NAME OF OFF-SITE LOCATION WHERE WASTE WAS DELIVERED)

SOUTHERN CALIFORNIA CHEMICAL CO.

5. FACILITY'S EPA I.D. NUMBER

TX-P-C-4-7-8-2-3-2-6-5

6. FACILITY SITE ADDRESS

1000 N. FIRST ST.

7. FACILITY'S MISSOURI I.D. NUMBER

CITY

GALLUP

STATE

TX

ZIP CODE

75040

## SECTION 3 WASTE IDENTIFICATION

1	8	9	10	11	12	13	14	15
	DESCRIPTION OF WASTE	DGT HAZARD CODE	EPA HAZARDOUS WASTE NUMBER	PREVIOUSLY REPORTED (SEE INSTRUCTIONS)	TOTAL AMOUNT OF WASTE	UNIT OF MEAS.	SPECIFIC GRAVITY	HANDLING CODE
1	AC, WASTE ACCELING CONTAINING LIQUIDS (PACIFIC) (UNIT 19)	0-3	0-0-0-0		18,120	6	1.2	T-1
2	CELLULOSE FIBER (UNIT 19)					6		
3	CELLULOSE FIBER (UNIT 19)							
4	AC, WASTE CONTAINING LIQUIDS (PACIFIC) (UNIT 19)	3	0-0-0-0		4,000	6	1.1	T-1
5	CELLULOSE FIBER (UNIT 19)							
6	CELLULOSE FIBER (UNIT 19)							
7								
8								
9								
10								

## SECTION 4 TRANSPORTATION SERVICES UTILIZED

16. COMPANY NAME

SOUTHERN CAL. CHEM.

17. MISSOURI I.D. NO.

H-1-0-0-7-7-8-2-3-2-6-5

18. USEPA I.D. NUMBER

H -

H -

H -

## SECTION 5 COMMENTS

ALL TONS ARE RECLAIMED



## MISSOURI DEPARTMENT OF NATURAL RESOURCES

P.O. BOX 176

(314) 751-3176

JEFFERSON CITY, MISSOURI 65102

## GENERATOR'S HAZARDOUS WASTE REPORT SUMMARY SHEET

PART II

OFFICE USE ONLY

NOTE ► PLEASE READ INSTRUCTIONS AND EITHER PRINT OR TYPE

Entries made on this page must summarize the total amount of waste transported off-site to an individual facility during the specified quarter. Separate sheets must be completed for each facility utilized.

## SECTION I REPORT IDENTIFICATION

1. FOR THE PERIOD ENDING (CHECK ONE &amp; FILL IN YEAR)

☐ 9-30- (YEAR)☒ 12-31-96 (YEAR)☐ 3-31- (YEAR)☐ 6-30- (YEAR)

2. PAGE

2 OF 5

3. GENERATOR'S MISSOURI ID NUMBER

01317

## SECTION II FACILITY IDENTIFICATION

4. FACILITY NAME (NAME OF OFF-SITE LOCATION WHERE WASTE WAS DELIVERED)

CYRUS ALUMINUM CORP.

5. FACILITY'S EPA I.D. NUMBER

A20 060624252

6. FACILITY SITE ADDRESS

Hwy 60/70

7. FACILITY'S MISSOURI I.D. NUMBER

CITY

CLAVIOL

STATE

KENTUCKY

ZIP CODE

50532

## SECTION III WASTE IDENTIFICATION

8	9	10	11	12	13	14	15
DESCRIPTION OF WASTE	DGT HAZARD CODE	EPA HAZARDOUS WASTE NUMBER	PREVIOUSLY REPORTED (SEE INST.)	TOTAL AMOUNT OF WASTE	UNIT OF MEAS	SPECIFIC GRAVITY	HANDLING CODE
1. NO. HAZARDOUS WASTE SOLID SOL. (ECC6, PCE)	1.5	F-C C-C		52.64	M		TCY
2. SOLID WASTE (LEAD) 417-663-0751 OR ENRIF							
3. GELLY 100% INERTS OR PCE							
4.							
5.							
6.							
7.							
8.							
9.							
10.							

## SECTION IV TRANSPORTATION SERVICES UTILIZED

16 COMPANY NAME	17 MISSOURI ID NO	18 USEPA ID NUMBER
a. INTERSTATE MOTOR TRANSIT	H-114	40-05-095-03879-8
b.	H-	
c.	H-	
d.	H-	

MATERIAL IS RECLAIMED



MISSOURI DEPARTMENT OF NATURAL RESOURCES  
P.O. BOX 176 (314) 751-3176  
JEFFERSON CITY, MISSOURI 65102

Feb 11/28/91

PART I  
OFFICE USE ONLY

# GENERATOR'S HAZARDOUS WASTE REPORT SUMMARY SHEET

NOTE ► PLEASE READ INSTRUCTIONS AND EITHER PRINT OR TYPE

Regardless of whether any off-site shipment occurred, as a registered generator of hazardous waste, you must complete, sign, and transmit this form to the Department of Natural Resources.

## SECTION A REPORT IDENTIFICATION

1. TYPE OF REPORT (CHECK ONE)

☒ QUARTERLY ☐ ANNUAL (NON-GENERATOR)

(IF ANNUAL CHECKED, PLACE X IN 6-30 BOX)

2. FOR THE PERIOD ENDING (CHECK ONE & FILL IN YEAR)

☐ 9-30- (YEAR)

☒ 12-31-90 (YEAR)

☐ 3-31- (YEAR)

☐ 6-30- (YEAR)

3. PAGE

1 OF 3

## SECTION B GENERATOR IDENTIFICATION

4. GENERATOR'S NAME

LITTON SYSTEMS - ADVANCED CIRCUITRY DIV.

5. GENERATOR'S USEPA I.D. NUMBER

M.C.D.C. 7252903

6. GENERATOR CONTACT PERSON (NAME)

NEIL D. SCHAFER

TELEPHONE NUMBER

417-862-0751

7. GENERATOR'S MISSOURI I.D. NUMBER

21317

8. MAILING ADDRESS

4811 W. KEARNEY

CITY

SPRINGFIELD

STATE

MO.

ZIP CODE

65803

9. PLANT ADDRESS

SAME AS ABOVE

CITY

STATE

—

ZIP CODE

—

10. NAME OF PARENT FIRM

LITTON INC.

OFFICE USE ONLY

## SECTION C HAZARDOUS WASTE GENERATED (CHECK ONE)

☒ SHIPPED OFF-SITE. Complete part 2, attach completed hazardous waste manifests, sign certification and transmit to the department.

12.

☐ REPORTABLE QUANTITY NOT GENERATED. Sign certification and transmit to the department.

13.

☐ REPORTABLE QUANTITY GENERATED BUT NOT SHIPPED OFF-SITE THIS QUARTER. Sign certification and transmit to the department. (Do not complete Part 2)

## SECTION D CERTIFICATION

## EMPLOYEE CERTIFICATION STATEMENT

I certify under penalty of law that I have personally examined and am familiar with the information submitted in this and all attached documents and that based on my inquiry of those individuals immediately responsible for obtaining the information, I believe that the submitted information is true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment.

PRINT NAME

NEIL D. SCHAFER

SIGNATURE

*Neil D. Schaffer*

DATE

1/28/91

RECEIVED  
FEB 08 1991

WASTE MANAGEMENT PROGRAM  
MISSOURI DEPARTMENT OF  
NATURAL RESOURCES